Amendments to the Claims:

Listing of Claims:

1. (original) A method of detecting inter-symbol interference (ISI) of a symbol for adjusting a boundary of the symbol utilized by an OFDM system, wherein each symbol includes a plurality of signals respectively transmitting via a plurality of sub-carriers, the method comprising:

computing a first correlation value representing the correlation between a plurality of first signals of a first symbol and a plurality of second signals of a second symbol previous to the first symbol, wherein the first and the second signals are both transmitted via the same sub-carriers;

computing a second correlation value representing the correlation between the first signals and a plurality of third signals of a third symbol next to the first symbol, wherein the first and the third signals are both transmitted via the same sub-carriers;

comparing the first correlation value with the second correlation value; and

adjusting the timing of the boundary according to the comparison result.

2. (original) The method of claim 1, wherein the signals include a plurality of pilot signals and a plurality of data signals.

3. (original) The method of claim 2, wherein the corresponding pilot signals of the first, the second, and the third symbols are not the same and the first, the second, and the third signals are all pilot signals.

4. (original) The method of claim 3, wherein the value of the first, the second, and the third signals are predetermined.

5. (original) The method of claim 2, wherein the first, the second, and the third signals are

all data signals.

6. (original) The method of claim 4, wherein the corresponding pilot signals of the first, the second, and the third symbols are all the same.

7. (original) The method of claim 1, wherein the step of computing the first correlation value comprises:

computing a conjugated value of the first signals;

multiplying each of the conjugated first signals by the corresponding one of the second signals for generating a product value; and

generating the first correlation value according to the summation of the product value.

8. (original) The method of claim 7, wherein the first correlation value is generated according to summation of the absolute value of the product value.

9. (original) The method of claim 7, wherein the first correlation value is generated according to summation of the square value of the product value.

10. (original) The method of claim 1, wherein the step of computing the second correlation value comprises:

computing a conjugated value of the first signals;

multiplying each of the conjugated first signals by the corresponding one of the third signals for generating a product value; and

generating the second correlation value according to the summation of the product value.

11. (original) The method of claim 10, wherein the second correlation value is generated according to the summation of the absolute value of the product value.

12. (original) The method of claim 10, wherein the second correlation value is generated according to the summation of the square value of the product value.

13. (original) The method of claim 1, wherein method further comprises:
equalizing and slicing the second symbol for generating the second signal; and
equalizing and slicing the third symbol for generating the third signal.

14. (original) An apparatus of detecting inter-symbol interference (ISI) of a symbol for adjusting a boundary of the symbol utilized by an OFDM system, wherein each symbol includes a plurality of signals respectively transmitting via a plurality of sub-carriers, the apparatus comprising:
a first correlator for computing a first correlation value representing the correlation between a plurality of first signals of a first symbol and a plurality of second signals of a second symbol previous to the first symbol, wherein the first and the second signals are both transmitted via the same sub-carriers
a second correlator for computing a second correlation value representing the correlation between the first signals and a plurality of third symbols of a third symbol next to the first symbol, wherein the first and the third signals are both transmitted via the same sub-carriers;
a comparator for comparing the first correlation value with the second correlation value; and
a timing controller for adjusting the timing of the boundary according to the comparison result.

15. (original) The apparatus of claim 14, wherein the signals include a plurality of pilot signals and a plurality of data signals.

16. (original) The apparatus of claim 15, wherein the corresponding pilot signals of the first, the second, and the third symbols are not the same and the first, the second, and the third signals are all pilot signals.

17. (original) The apparatus of claim 16, wherein the value of the first, the second, and the third signals are predetermined.

18. (original) The apparatus of claim 15, wherein the first, the second, and the third signals are all data signals.

19. (original) The apparatus of claim 18, wherein the corresponding pilot signals of the first, the second, and the third symbols are the same.

20. (original) The apparatus of claim 14, wherein the first correlator further comprises:
a conjugating unit for computing a conjugated value of the first data;
a multiplying unit for multiplying the conjugated first data by the second data for generating a product value; and
a correlation value computer for generating the first correlation value according to the product value.

21. (original) The apparatus of claim 20, wherein the correlation value computer further comprises:
a absolute value calculating unit for calculating the absolute value of each of the product values; and
a summation unit for calculating the sum of the absolute value of the product values.

22. (original) The apparatus of claim 20, wherein the correlation value computer further comprises:

a square value calculating unit for calculating the square value of each of the product values; and

a summation unit for calculating the sum of the square value of the product values.

23. (original) The apparatus of claim 14, wherein the second correlator further comprises:

a conjugating unit for computing a conjugated value of the first data;

a multiplying unit for multiplying the conjugated first data by the third data for generating a product value; and

a correlation value computer for generating the second correlation value according to the product value.

24. (original) The apparatus of claim 23, wherein the correlation value computer further comprises:

a absolute value calculating unit for calculating the absolute value of each of the product values; and

a summation unit for calculating the sum of the absolute value of the product values.

25. (original) The apparatus of claim 23, wherein the correlation value computer further comprises:

a square value calculating unit for calculating the square value of each of the product values; and

a summation unit for calculating the sum of the square value of the product values.

26. (currently amended) The apparatus of claim 14, wherein the apparatus further comprises:

a first equalizer for equalizing the second symbol;

a first slicer coupled to the first correlator for slicing the equalized second symbol and generating the second signal;

a second equalizer for equalizing the third symbol; and

a second slicer coupled to the second correlator for slicing the equalized third symbol and generating the third signal[[;]].

27. (new) The method of claim 1, wherein the step of adjusting the timing of the boundary comprises:

delaying the timing of the boundary when the first correlation value is greater than the second correlation value, or advancing the timing of the boundary when the second correlation value is greater than the first correlation value.

28. (new) The apparatus of claim 14, wherein the timing controller delays the timing of the boundary when the first correlation value is greater than the second correlation value, or the timing controller advances the timing of the boundary when the second correlation value is greater than the first correlation value.